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Attorney Docket No. 50450-8031.US00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR APPLICATION OF: Bartelmez & Iversen

SERIAL NO.: 09/684,061

FILED: October 6, 2000

FOR: **ANTISENSE COMPOSITIONS AND CANCER-TREATMENT
METHODS**

EXAMINER: J. Zara

ART UNIT: 1635

CONFIRMATION NO. 2847

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Amendment

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In response to the Office action mailed May 15, 2002 in the above-identified application, please amend the application as indicated below. Enclosed herewith are a Petition for a two-month extension of time, a Request for Continued Examination (RCE), a Declaration under 37 CFR §1.132 and accompanying references, and fees totaling \$570 (\$200 for time extension and \$370 for RCE).

In the Claims:

Please replace claims 1, 3-8, 10, and 12-20 with the rewritten claims below. Also enclosed, starting on a separate page following this response, is a marked copy of the presently amended claims showing all changes relative to the previous version.

1. (Twice Amended) A method of modulating hematopoietic stem cell differentiation, comprising:

contacting said cells with one or more antisense morpholino oligomers, having a substantially uncharged backbone and a base sequence directed to a target sequence spanning the translational start codon or an intron or exon junction site of an mRNA preferentially expressed in stem cells,

wherein said contacting is effective to achieve (i) an increase in the number of lineage committed progenitor cells and their progeny, and/or (ii) a slowing or diminution of the growth of cells exhibiting a loss of growth control, or a reduction in the total number of such cells.

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